

Phonemic vs. Phonetic

- Focus on "function" of the sound rather than the "form" of the sound.
- OK in principle but in practice we can't totally separate these two aspects.
 - Difference is mostly on how we organize the targets and how we decide to progress.
 - When you practice function you are also practicing form and (once you get to the word level) vice versa.

Goal-Attack Strategies

- With only a few sounds to work on, the order we work on them probably doesn't make much difference.
- With multiple errors we need a strategy for how to organize the targets.
 - Applies to both phonetic and phonemic approaches.

Goal-Attack Strategies

- Three possible ways to "attack the goals".
 - 1. Vertical strategy – work on one target sound at a time until the child masters it, then start the next target sound.
 - 2. Horizontal strategy – also called a multiple sound approach. Work on several target sounds all at the same time.

Goal-Attack Strategies

- 3. Cyclical strategy – also called a "cycles" approach.
 - Work on each target sound by itself for a specific period of time (e.g., 3-4 sessions).
 - Regardless of progress, switch to next target sound for the same amount of time, then switch to next target sound etc.
 - Once all target sounds have been worked on, a "cycle" is complete.
 - Check progress and start cycle again (drop out any target sounds that have been "mastered").

Minimal Pair Contrast Therapy

- Most phonemic approaches use minimal word pairs (differ on a single phoneme).
- Create a contrast to show the child how differences in sound create differences in meaning (show function).
- Includes practice of form.

Minimal Pair Contrast Therapy: Basic Plan

- 1. Select target word pairs.
- 2. Discuss target words to clarify meaning.
- 3. Confirm discrimination between words.
- 4. Production practice – often use role reversal; child attempts words and SLP picks up pictures (may need phonetic training here if incorrect).
- 5. Practice in units above word level (not always specified in some programs).

Not all Minimal Pairs are Equal

- Consider the following minimal pairs:
 - pin – bin; pin – sin; pin – gin.
- Differ on varying numbers of features:
 - pin – bin (1; voicing).
 - pin – sin (2; place, manner).
 - pin – gin (3; place, manner & voicing).

Minimal Pair Contrast Therapy

- Several options for selection of pairs (based in different theories):
 1. Natural processes approach.
 2. Maximal opposition approach.
 3. Multiple oppositions approach.

Minimal Opposition Approach

- Targets = missing phonemes (not distinctive features).
- Minimal pairs selected based on articulatory features (place, manner and voicing).
- Like distinctive features, this approach best suited to substitution errors (not omissions or distortions).

Minimal Opposition Approach

- Target contrasts with the fewest differences between target and error.
 - E.g., /f, v/ differ only on voicing, /ʃ, tʃ/ differ on place and manner.
- Priority targets =
 - Earlier developing sounds.
 - Sounds with greater affect on intelligibility (e.g., more frequent in the language).
 - Stimulable sounds.

Natural Processes Approach

- Currently one of the most widely used approaches.
- Therapy itself is not particularly unique.
 - Difference is how targets are selected and organized.
- Probably most effective for child with just a few processes present.

Natural Processes Approach

- Target processes that occur the most often or have greatest impact on intelligibility.
- Select minimal pairs that contrast what child usually does with correct production.
 - E.g., tea vs. key for fronting.
 - Sea vs. tea for stopping.
 - Weed vs. read for gliding.

Maximal Opposition Approach

- Based on the idea that error sounds should be contrasted with VERY different sounds.
- Makes the error sound stand out more.
- Both sounds should be those NOT already in the phonemic inventory.
- Several studies have suggested that generalization may be faster with this approach.

Maximal Opposition Approach

- Two different versions:
 1. Original version - create oppositions based on articulatory features (place, manner, voicing).
 2. Latest version - create oppositions based on distinctive features.
 - Select sounds that differ on the most features overall.
 - Give priority to sounds that differ on major class features (consonantal, sonorant, vocalic).
 - If there are several options, select sounds that differ on the most distinctive features.

Maximal Opposition Approach

- Two sounds that differ on a major class feature would be the most different.
 - /r/ = [+sonorant] /s/ = [-sonorant]
 - /j/ = [+consonantal] /w/ = [-consonantal]
 - /l/ = [+vocalic] /k/ = [-vocalic]
- glide vs any other consonant
- nasal or liquid vs obstruent

Multiple Oppositions Approach

- Likely most useful when one phoneme is being used for more than one other.
 - E.g., child who uses /t/ for /k, s, ʃ, tʃ/ .
 - /t/ used in place of other voiceless obstruents .
 - May be useful for “systematic sound preferences”.
- Create a set of contrasting words and focus on all of them at once.

Multiple Oppositions Approach

- Idea is to create maximum “cognitive” stress on the sound system and force a complete reorganization.
- Does impose great “semantic” demands on the child.
 - Lots of different meanings to keep track of.
 - May not be appropriate for children with poor cognitive skills.

The Child with Multiple Vowel Errors

- Relatively uncommon but does happen.
- Has not been studied much.
- May see either a limited inventory or a high frequency of substitution errors.

The Child with a Limited Vowel Inventory

- Limited data on development of vowels but three developmental groups for vowels have been suggested (possible treatment order):
- (1) Early /i, a, u, o, ʌ/.
 - /i, a,u/ almost universal.
- (2) Middle /æ, ʊ, ɔ, ə/.
- (3) Late /e, ε, ɪ, ə̃, ɜ̃/.
 - /ə̃, ɜ̃/ clearly later developing.

The Child with a Limited Vowel Inventory

- Create minimal pairs based on vowels.
- Possible approach
 - select vowels outside child's inventory (maximal oppositions approach)

The Child with Frequent Vowel Substitutions

- Two possible approaches:
- 1. Focus on targets that are inconsistent (more than one other vowel used for them).
 - Create direct contrasts between target vowel and a maximally different vowel.
 - 2. Target a vowel that is used in place of more than one other vowel.
 - contrast it systematically with the other vowels.

The Child with Frequent Vowel Substitutions

- Both of these approaches assume that the errors are phonemic.
- Because vowels represent a general space in the mouth and not as specific a place of articulation as consonants, we shouldn't rule out speech motor problems.
 - May be having difficulty with precise placement.
 - Any time there are vowel problems, we should revisit the oral-facial exam just in case.